

DIALECT VARIATION IN EARLY PERSIAN

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ONE of the many puzzles of Iranian dialectology is that quite apart from the countless Arabic and otherwise foreign loanwords in Persian, so many Iranian words of the Persian vocabulary are declared to be non-Persian intruders.

The Persian word for 'king', *šāh*, is not proper Persian, say the comparative grammarians, because the form to be expected in proper Persian would be **šāš*; the word for 'town', *šahr*, which at an early period meant 'kingdom', ought to have been **šas*; instead of Pers. *sang* 'stone' one expects **hang*; instead of *buzurg* 'big' **buhurg*; instead of *asp* 'horse' **as*; instead of *āsmān* 'sky' **āhmān*; and even instead of *Fārsī* 'Persian' **Pāhlī*.

All these words, and very many others conveying the most ordinary meanings, disagree with one or another rule of what is believed to be the phonology of proper Persian, but agree with what little is known, or can be inferred, about Median phonology. They are accordingly declared Median. And they are declared Median, rather than belonging to some other non-Persic language, for instance Avestan, which in respect of the Old Iranian antecedents of these words behaves like Median, because the ancestors of some of them occur in a supposedly non-Persic form already in Old Persian, at a time, about 520 B.C., when the Persians, having not long before taken over from the Medians a vast empire, would be likely to have been influenced by the administrative, as well as generally cultural vocabulary of the Medes.

And yet, already in the 6th century B.C. the choice of supposed loanwords seems erratic. Why was the OP word for 'king', *xšāyaθya-*, ancestor of NP *šāh*, taken from Median, when the word for 'kingdom' was retained in its proper OP form, *xšassa-*? Why did the ancient Persians adopt the Med. word for 'great', *vazrka-*, ancestor of NP *buzurg*, but retain their own word for 'greatest', *maθišta-*, ancestor of NP *mahist*? What induced them to borrow from Median the word for 'sky', *asman-*?

Another source of wonder is the relatively frequent break which is apparent between certain OP words and their Middle and New Persian counterparts. If OP *pussa-* 'son', to which in Median must have corresponded **puθra-*, survives in MP as *pus*, why was OP *xšaša-* 'kingdom', to which in Med. corresponded *xšaθra-*, given up in MP and replaced with *šahr* which continues *xšaθra-*? And there are as many MP words with *hr* from OIr. *θr*, as with *s*. A similar break can be observed in the case of MP *sag* or *sang* 'stone', which is understandable as the continuation of Med. **asa(n)ga-*, but not of the attested OP *aθa(n)ga-* which in MP should have become **ha(n)g*.

It is, of course, pointless to ask 'why so?', unless one knows the answer to the question 'why not the other way round?'. The inversion of the question 'why did the Persians borrow their words for "king" and "stone" from Median?' is 'why cannot the words for "king" and "stone" be Persian?'. This latter question is what the present paper has been designed to attempt to answer.

The problem of internal dialect differentiation in Persian, as distinct from the presence in Persian of non-Persic elements, has scarcely as yet been broached. In the whole literature on Persian historical grammar I can find only one claim of an incisive instance of internal dialect differentiation. This is a claim made by Professor Henning in 1933,¹ in connection with a difference discernible within New and Middle Persian, in the treatment of the IE cluster *k̑y*, which in Avestan appears as *sy*.

On the one hand we have MP *wēš*, NP *bēš* 'more', from an OIr. comparative whose Avestan equivalent would be **vasyah-*; ² and similarly NP *kašaf* 'tortoise', from an OIr.

¹ *ZII* ix, 207.

² From the data I quoted in *Indo-Iranica (Mélanges Morgenstierne)* 78 sq. in support of a derivation (pp. 87 sq.) of MP *pēš* from OIr. **pasyā*, parallel to that of MP *wēš* from **vasyah-*, Bal. *pis* must be removed. I have come to realize that although W. Geiger was wrong in thinking that the prefix of Bal. *pišti-parampōši* 'four days hence' means 'after', he was right in identifying the prefix of *pis-parampōši* with *pas*, since only thus the mutual relation of the two Bal. synonyms will correspond to that of the two NBš synonyms meaning 'four days hence', *pištom-para'uš* and *pas-para'uš*.

form corresponding to Av. *kasyapa-* and to Ved. *kaśyāpa*.¹ The Av. cluster *sy* is here represented by *š*, a preceding short vowel having been palatalized and lengthened in Persian under the stress.²

Against this development stands the one exemplified by NP *mih* 'greater', whose Manichean MP antecedent is spelled *mhy*, and which corresponds to Av. *masyah*-.³

To appreciate Henning's argument one must bear in mind that in an impressive number of instances there corresponds to Av. *s* from an IE palatal an OP voiceless dental spirant. For example, the OP equivalent of the Av. superlative *masišta-* 'greatest' is *maθišta-*. In OP, therefore, the outcome of the IE voiceless palatal had coalesced, at least antevocally, with *θ* resulting from an IE voiceless dental. For brevity's sake I shall call the OP *θ* 'palatal theta' when it goes back to an IE *ĥ* or *ĥh*, and 'dental theta' when its IE ancestor was *t* or *th*. Similarly with the corresponding OP voiced dental spirant: 'palatal delta' from IE *ǵ* or *ǵh*, 'dental delta' from IE *d* or *dh*.

We have noted the presence of a palatal theta in *maθišta-*, which in OP was indistinguishable from the dental theta of,

The *i* of Bal. *pis-*, which was the main cause of my misapprehension, will then be due to contamination of the *a* of the earlier **pas-* 'after' with the *i* of *pištī-* 'before' in synonymous compounds having the same second term. The reconstruction of **pasyā* thus rests exclusively on the *s* of SBš *pester* (whose *e* can represent any OIr. vowel or diphthong), Rudbari *piester*, and Bal. *pēsar-*, all of which mean 'before'. The elimination of Bal. *pis-* makes it unnecessary to compare the vowel of NP *kih* or Bal. *kis(ān)*.

¹ The other examples quoted by Henning are, apart from Arm. *šau* (on which see below, pp. 5, 18), NP *xurōš-* 'to shout' and MP *hndyš-* (NP *andēš-*) 'to consider'. The last occurs with *š* also in Manichean Parthian (*ndyš-*), where it must therefore be a Persian LW, like *ʾhrʾm-*, *ʾwdʾy-*, and *brhm*, cf. below, p. 9, n. 1.

² A preceding diphthong *au* was not palatalized, cf. *xurōš-* in prec. fn.; neither was *ā*, to judge from the hitherto unrecognized example NP *parxāš* 'battle, quarrel' < *pari* + **xāsyā-* (**xāθya-*), against Sogd. *ʾxʾs*, *ʾnyʾs* 'struggle', *pxʾs* 'quarrel', < *ā*, *ham*, *upa* + **xāsa-*. Cf. below, p. 27, n. 2.

³ Similarly NP *kih* 'smaller', corresponding to Av. *kasyah-*, which Henning, of course, quoted. In the text above, which was read out at a meeting of the Society, the number of examples has been kept at a minimum, so as not to obscure the trend of the argument.

say, *raθa-* 'chariot', connected with Lat. *rota*. But the dental *θ*, when immediately followed by *y*, became *š* in OP, a typical example being *mṛšyu-* 'death', against Av. *mərəθyu-* and Ved. *mṛtyú*.

Henning therefore argued that the OP ancestor of NP *bēš* must have been **vaθyah-*, with *θ* from OIr. *s* from an IE palatal as in OP *maθišta-*; and that the palatal theta of **vaθyah-* had become *š* before *y* in conformity with the change of dental *θ* to *š* before *y* in *mṛšyu-* 'death'.¹ On the other hand the *θ* of the OP comparative **maθyah-*, ancestor of NP *mih*, although it, too, was palatal, did not change to *š* before *y*.

This then is the Persian dialect differentiation envisaged by Henning: a standard form of OP, in which palatal *θ*, unlike dental *θ*, remained unchanged before *y*, eventually to become *h* in Middle and New Persian; and an OP dialect different from the standard language, in which palatal *θ* underwent before *y* the same change to *š* as dental *θ*.

Henning's theory seems plausible enough. But before we can accept it unreservedly we must obtain clarity on two questions. The first relates to his assumption of an intermediate stage *θ* between an earlier *s* and the later *š*. Granted that the immediate ancestor of MP *wēš* was **vašyah-*, is it really necessary for the immediate ancestor of the latter to have been **vaθyah-*? As the theoretical **vaθyah-*, with palatal theta, would in any case be from an earlier **vasyah-*, might not **vašyah-* have developed straight from **vasyah-*? Such an assumption may seem all the more plausible as the attested OP positive of **vašyah-* is *vasai* or *vasi*, with *s*, not *θ*, and there is nothing to prove that the corresponding superlative was not **vasišta-*, rather than **vaθišta-*.

According as we answer the question as to whether an intermediate *θ* needs to be postulated, either of two further questions will arise. If we decide that **vašyah-* goes back straight to **vasyah-*, then we must ask whether it is right to regard either **vasyah-* or **vašyah-* as Persian dialect forms.

¹ The above is my own, detailed, formulation in respect of the antecedents of NP *bēš*, of a rule Henning expressed more concisely in general terms only.

For if the typical OP change of *s* to *θ* played no part in the prehistory of **vašyah-*, then **vašyah-*, straight from **vasyah-*, may as well have been a Median LW in Persian.

If on the other hand we agree with Henning that **vašyah-* had developed from **vaθyah-*, then we must ask whether the preservation of *θ* in **maθyah-* really had a phonological reason, and was not merely due to analogy. For, since the attested corresponding superlative is *maθišta-* in OP, where *θ*, not standing before *y*, had no reason to become *š*, it would only be natural for the comparative **maθyah-* to have resisted the phonological pressure to become **mašyah-*, under the analogical influence of *maθišta-*.

But if analogy were the reason why **maθyah-* remained unchanged, Henning's attribution of **vašyah-* to a Persian dialect different from the one to which **maθyah-* belonged, would be unjustified; **vašyah-* would merely exemplify a rule, of which **maθyah-* would be an exception due to analogy.

To test Henning's theory we must therefore in the first place decide whether OP **vašyah-* really presupposes an earlier **vaθyah-*. And if we find that it does, we must further inquire whether there is reason to think, that the *θ* of **maθyah-* might have remained unchanged independently of any analogical pressure on the part of *maθišta-*.

With regard to the immediate ancestor of **vašyah-*, granted that in OP *θ* before *y* did become *š*, it may be thought that it would still be natural also for *s* to be palatalized by a following *y* and become *š*. The problem may seem insoluble. For how can *š* from *sy* tell us whether it goes back to an intermediate stage *θy*?

However, one of the Persian words with *š* which Henning considered, is Arm. *šau* 'black', to which in Avestan corresponds *syāva-*. *Šau* is evidently a Persian LW in Armenian, lost in Persian itself, where the word used for 'black' is *siyāh*, from **syāva-*.¹

¹ ZII ix, 253. Here Henning actually printed '*š* < *sy*', but his argument on p. 207 suggests that this was a brachylogy for '*š* < *θy* < *sy*'.

Now, if *siyāh*, on account of its *s*, is regarded as a LW from a non-Persic dialect, then of course we still cannot tell whether the *š* of *šau* was from *θy* or straight from *sy*. But if we should find that *siyāh* has as much right to be considered Persian as Arm. *šau*, then the *š* of *šau* would necessarily be from *θy*.

Our immediate task must therefore be to discover whether the presence in a Persian word of *s* from an IE palatal precludes the word from being genuinely Persian.

On the treatment of the IE palatals in Persian two theories have been advanced. One, the older, was given a final formulation by Professor Nyberg in 1931.¹ The other was proposed by Professor Morgenstierne in 1945.²

According to the older theory, where OP *θ* represents an IE voiceless palatal pure and simple, that is, not forming part of a cluster, it had developed from an earlier, proto-Iranian, *s*. Thus OP *aθanga-* 'stone' would be a development of proto-Iranian **asanga-*, which in Median would have remained **asanga-*. If therefore in Middle and New Persian the word for 'stone' appears with *s*, and not with *h*, this proves that it had been borrowed from a non-Persic dialect, presumably Median.

There are, however, two circumstances in which according to Nyberg the IE voiceless palatal appears as *s* also in genuine OP words. One is when in IE the palatal was preceded by *s*, the other when it was followed by *w*. Typical examples are OP *trsa-* (NP *tarsīdan*) 'to fear', from IE **tr(s)-sko-*, and *asa-* 'horse' < proto-OP **aswa-* < In.-Ir. **aśwa-* < IE **ekwo-*. *Trsa-*, according to Nyberg, need not be a Median LW, even though the corresponding Median form must also have been **trsa-*, while *asa-* cannot even have been Median, as the Median word for 'horse' demonstrably was **aspa-*.

The reason why **asanga-*, if it occurred in an OP inscription, should not be regarded as genuine Persian, while *trsa-* may be, and *asa-* must be, so regarded, is in Nyberg's opinion that the *s* of the OP spellings *trsa-* and *asa-* represents a double *s* that

¹ *Festschrift Wilhelm Geiger*, 213 sqq.

² 'IE *k*' in Kafiri', *NTS* xiii, 225 sqq.

would not change to θ , the gemination being the result of assimilation within the earlier clusters.

Beside *tṛsa-* from IE **tṛ(s)skō-*, however, OP has *θadaya-* 'to appear' from **skēdoyo-*. Nyberg therefore assumed that in initial position double *s* had been degeminated early enough to become involved in the OP change of single *s* to θ .

Such an early degemination of *ss* he believed to have taken place also internally before consonants. He accordingly explained MP *tuhīg* 'empty', which contrasts with Parth. *tusīg*, as deriving from OP **tuθyaka-* after the latter had become **tuθiyaka-*. The evident etymological identity of OP **tuθya-* with Ved. *tucchyá* from IE **tus-skīyo-*, suggested to Nyberg that OP θ also in this case represented an earlier *s* that had been simplified from *ss*, the gemination having again been due to assimilation of an IE consonant cluster.

But, and here Nyberg's theory impinges on Henning's, in order to account for the fact that OP **tuθyaka-* did not become **tušyaka-*, and hence **tušīg* in MP, Nyberg assumed that the change of OP dental θ to $\š$ before *y*, had ceased to take place by the time palatal θ developed from *s*.

It is obvious that if this assumption were correct, OP **vašyah-* could not, with Henning, be derived from an intermediate **vaθyah-*, but would have to go back straight to **vasyah-*.

Let us now consider Professor Morgenstierne's theory. According to him the OP palatal θ represents a more archaic stage of development than the corresponding Median and Avestan *s*. The Indo-Iranian sound interjacent between IE palatal \hat{k} and OP palatal θ was in his opinion a palatal *t*, which in all Iranian languages other than OP became *s* antevocally. To account for OP *θadaya-* and **tuθyaka-*, Morgenstierne assumed that proto-Iranian *sθ* from IE $\hat{s}\hat{k}$ had been simplified initially and before consonants at an early date. By contrast, OP *tṛsa-* shows in Morgenstierne's opinion, that intervocally proto-Ir. *sθ* from IE $\hat{s}\hat{k}$ remained until a later date, eventually to be assimilated to double *s*.

As to the reason why **tuθyaka-* did not become **tušyaka-*,

this was according to Morgenstierne that the change of anteconsonantal *sθ* to *θ*, though it took place at an early date, was later than the change of dental *θ* to *š* before *y*.

On Morgenstierne's assumptions, therefore, seeing that the *š* of OP **vašyah-* represents an IE *ḱ* that was never preceded by *s*, Henning's derivation of that *š* from an earlier *θ* would be the only possible one.

We must now choose between the two theories, Nyberg's and Morgenstierne's. No Iranianist will lightly contradict Professor Morgenstierne, the leading Iranian dialectologist of our time. But this particular theory of his seems to me untenable.

Firstly on general grounds.¹ The admissibility of his view that OP palatal *θ* had been a *θ* from the dawn of Old Persian prehistory, really depends on the admissibility of two of its corollaries. One is, that correspondingly to the change of IE *ḱ* to *θ*, the IE cluster *sḱ* had become *sθ* in proto-OP. The other corollary, which is actually a sub-corollary, is that it is this *sθ* which was reduced to the initial *θ* of *θadaya-*, and to the anteconsonantal *θ* of **tuθyaka-*.

Both these developments go against the grain of Old Iranian phonetics. No Old Iranian word shows the cluster *sθ*, and it is virtually impossible, on the threshold between Indo-Iranian and proto-Iranian, for a cluster *sθ* to develop. Where theoretically a *θ* ought to have stood after *s*, we find *t* instead. Thus the active 2nd person singular of the perfect of Av. *vid-* 'to know' is *vōistā*, corresponding to Ved. *véttha*, while in the perfect of *dā-* 'to give' Avestan has *dadāθa*, corresponding to Ved. *dadātha*. Likewise, while correspondingly to Ved. *dā-trá* 'gift' Avestan has *dā-θra-*, the Avestan correspondent of Ved. *vás-tra* 'dress' is *vas-tra-*.

As to the simplification of the cluster *sθ* to *θ*, by which Morgenstierne sought to account for OP **tuθyaka-*, the loss of internal *s* before a dental would not only be unparalleled in Iranian, but strangely conflicts with the treatment Morgen-

¹ For a reasoned defence of the older view on general grounds different from the ones here advanced, see M. Leumann, *IF* lvi (1942), 3 sq.

stierne himself assumes was at a later stage suffered by the same cluster *sθ* in *tṛsa*-.

Apart from these general, phonetic, considerations, it seems to me that the MP word for 'fish', *māhīg*, outright disproves Morgenstierne's contention. This word, it is generally agreed, derives from OP **māθiyaka*-, a *ka*-extension of an earlier **māsiya*- corresponding to Av. *masya*- and Ved. *mātsya*. In this word, however, the *s* of the Avestan, and therefore also of the earliest OP form, does not represent an IE palatal, but a plain dental *s*, which only failed to become *h* in proto-Iranian because it had once been preceded by *t*. If this *s* of non-palatal origin was replaced with *θ* in OP, what clearer proof need we ask for, that OP palatal theta had developed from proto-Iranian *s*?¹

Professor Morgenstierne, of course, foresaw this objection, and thought of forestalling it by assuming that the cluster *ts* of In.-Ir. **matsya*- had become *θs* in proto-OP, and that *θs* was simplified to *θ* simultaneously with the change of *sθ* to *θ* as seen in **tuθyaka*-. But not for nothing he quoted no parallel. A change of *ts* to *θs* is nowhere to be seen in Iranian. Supposing, however, that it had come about, it would be utterly un-Iranian for the new cluster *θs* to be simplified to *θ*, and not to *s*.

¹ See also below, p. 11, n. 2. If OIr. *s* other than from an IE palatal could become *θ* in OP, we may expect to find OP *δ*, too, replacing sometimes a *z* that is not from IE *ǵ(h)*. And so we do, not only in OP *Muδrāya*- 'Egypt', replacing **Muzrāya*-, but also, I suspect, in the preverb *uδ*, which is only attested in the augmented imperfect *uδ-a-patuta*. There is little enough to commend the alternative explanation, the only so far proposed, that OP alone among the Iranian languages has preserved the original dental of this preverb. The *h* of MP **hr²m*- 'to lead upward' is in any case more likely from *δ* than from *z*, just as MP *brahm*, *urwāhm*-, and *ēmāg* < **ēkmag* (see Henning, *TPS* 1944, 109) presuppose OP *δ*-forms **braδman*-, **urvāδman*-, and **aiδma*-. Man. Parth. *brhm* and **hr²m*- will then be Persian loanwords, like **ndyš*- (cf. above, p. 3, n. 1), *nyz²y*-, and **wd²y*- (on which two cf. Ghilain, *Essai*). The last has in MP preserved the *δ* of OP **uδ-āyaya*- (cf. Henning, *BBB* 108), as happened in the case of MP **ymydg* 'intercessor' < **uδi-maδyaka*-, and *pr²(²)dn(n)g* 'furtherance' < **frādanaka*-. MP *hr²stn* and *hrwptn* (cf. Henning, *ZII* ix, 225 and *BBB* 79), rather than *uδ/z*, may contain *han*, with *n* assimilated to *r*.

But the final refutation of Morgenstierne's theory arises from Professor Henning's recent article on 'Coriander'. In it he incidentally, but cogently, shows that the ubiquitous OP word for 'treasure', **ganza*-, was more exclusively Median than had been suspected (*Asia Major*, N.S., x, 196-8). Its proto-Iranian form, whose order of consonants is preserved in Parth. and Sogd. *yazn*, was **gazna*-, of which the proper OP outcome, **gažna*-,¹ survives only slightly changed in NP as *gašn* 'galore'. In Median, however, and in Median alone, the cluster *zn* suffered metathesis to *nz*, the ubiquity of the resulting **ganza*- being due to its having been adopted into the language of the Achaemenian administration.

Prima facie there is nothing in Henning's account of **ganza*- that conflicts with Morgenstierne's theory, although of course Morgenstierne would posit the earliest proto-Iranian form not as **gazna*-, but as **gažna*-, with palatal delta. But conflict arises the moment we bring in the Aramaic rendering of the OP word for 'treasurer', which in Ezra is *gzbr*, but in Daniel *gdbr*, in both cases with secondary disappearance of *n* before the old palatal. Professor Henning did not refer to *gdbr*, either for reasons of economy, as this form of the word does not affect his argument, or, just possibly, because he doubted its authenticity. Its authenticity, however, cannot, or can no longer, be doubted, since I know from Professor R. T. Hallock

¹ Henning reconstructs the proper OP form as **gašna*-. But from the OP treatment of IE *ǵ(h)n* after *r* and OIr. prothetic *x* in *baršnā* and *xšnāsa*-, it does not necessarily follow that the OP ancestor of NP *jašn* was **yašna*-(as Meillet-Benveniste assumed in *Grammaire du vieux-perse*, 69), and consequently that of NP *gašn* **gašna*-. NP *jašn* may be from OP **yažna*-, as MP *bašn*- is from **bažna*- < **bažina*- (see Henning, *BSOS* viii, 583). Since the OP names *Kambužya*- and **Žāmāspa*- are spelled in Aramaic *Kmbwzy* and *Zmisp*, there is no obstacle to interpreting the Aramaic spelling *mzdyyzn* as representing an OP compound **mazdayažna*-, rather than a supposedly Median form **mazdayazna*- (Arm. *mazdezn* being, of course, Parthian). If the tendency to devoice *ž* before *n* began in the 5th century B.C. **baržnā* and *baršnā*-, **yažna*- and **yašna*-, would have been equally acceptable forms at that period. Such an interpretation of Aram. *mzdyyzn* would leave us free to reconstruct the Median equivalent of this compound as **mazdayanza*-, in conformity with Henning's expectation. On OP **yažna*- as immediate antecedent of **yažna*- see below, p. 24, n. 1.

that in an unpublished Elamite tablet *kan-da-ba-ra* is found instead of the usual spelling *kan-za-ba-ra* of the Persepolis Treasury tablets.

Of course, since OP **ganzabara-* has always, on account of its *z*, been thought to be a Median LW, OP **gandabara-* may seem to be nothing but its expected OP counterpart. And so it is, in a way, but only in a way—since we now know that the true OP form had not suffered metathesis. The correct definition of **gandabara-* is that it is a Median loanword old-persianized. Its delta is nothing but a peculiar OP realization of the *z* of Median **ganzabara-*.¹ The proof that δ did replace *z* in suitable circumstances in OP is thereby obtained, and with it the rehabilitation of MP *māhīg* as a counterproof to Morgenstierne's theory that palatal θ was *not* a replacement of *s*.²

But the delta of OP **gandabara-* has more to offer. It reveals that the OP tendency to change sibilants into dental spirants had not spent itself, and perhaps even had not yet begun, at the time when the ancient Persians borrowed the

¹ The delta of **gandabara-* cannot be the continuation of the delta which Morgenstierne would have to attribute to the proto-Iranian form **gaδna-*, because that delta would be bound, even within the framework of Morgenstierne's theory, to become a palatal sibilant before *n*.

² Apart from **māthiyaka-* two more instances are available of an *s* not reflecting IE $\acute{k}(h)$ being replaced with θ in OP. One is *ka* 'somebody', occurring in Northern Baškardī and Baluči (borrowed from Persian), from **kah* < OP **kaθi*, against NP *kas* < OP **kasi* (see Meillet-Benveniste, *Grammaire*, 67). The other is Northern Baškardī *pa* 'afterwards', from **pah* < OP **paθā*, the θ -variant of the attested OP *pasā*. Beside *pasā* and **paθā* OP also had **pasčā* or **paščā*, attested through Elamite *ba-iš-za da-sa-bat-ti-iš* 'deputy chief-of-ten' (see Kent apud Cameron, *PTT*, 111, and cf. *JRAS*, 1954, 125 on this type of compound with *pasčā*). Since *da-sa* in this compound should represent the exclusively OP form **daθa-*, it is likely that *ba-iš-za* reflects a genuine Persian variant of *pasā*; cf. Henning, *Mitteliranisch*, 98 n. 1.

Having submitted the above interpretation of *ka* and *pa* to Professor Henning, I received from him the following note: "A striking example is Pers. *čī* 'something'. This really exists, e.g. in a well-known verse in the *Gulistān* (p. 25 ed. Platts):

mury jā'ē parad ke čīne buvad
ne ba-jā'ē ravad ke čī ne-buvad

(the bird flies to a spot where there is a $\delta\acute{\epsilon}\lambda\epsilon\alpha\phi$, but does not go where there is nothing)."

Median word **ganzabara-*. The palatal thetas and deltas of OP were therefore still of recent standing when in 520 B.C. OP inscriptions began to be written. Instead of representing a process that had reached completion, they may be tokens of a development which at that time was still in progress.

The present stem *trsa-* supports this conclusion. Nyberg, as we saw, believed its *s* to have resisted the change to *θ* because it was geminated. He could not know that in fact the *s* of *trsa-* did not resist the change. In the Southern Bāškardi dialect group which I sampled in 1956, and which has proved to be of a conservative Persic type, the present stem of the verb for 'to fear' is *tehr-*. This is evidently a metathesis of an older present stem **tr̥ha-*, from **tr̥θa-*.¹ And **tr̥θa-* will hardly have belonged to a dialect different from standard OP, since the latter is the language in which OIr. **asanga-* was represented by *aθanga-*.

The necessity of assigning to OP a form **tr̥θa-* leaves little ground for supposing that the *s* of the attested *trsa-* was geminated.² It is more likely that the reason underlying the failure of the inscriptions to present us with **tr̥θa-* was the same as accounts for the appearance in them of *asman-* and *vazrka-* instead of the expected 'proper Persian' **aθman-*³ and **vaδrka-*.⁴ And if the reason is common to all three words

¹ The possibility that SBš *tehr-* was borrowed from Indian, or from Pš *tarhēdal* (on which see Morgenstierne, *EVP*, s.v.), can safely be excluded.

² A fortiori IE *s̥k* will not have lived on as *ss* into the MP period. Henning's initial scepticism with regard to Bartholomae's derivation of MP *pašs'y* 'correspondingly to' from **pati-ssāyā-* (*ZII*, ix, 228²³) deserves preference over his later acceptance of that etymology (*ibid.* 253²⁹).

³ The tempting derivation of the *h* of SBš *yāhmōn* 'sky' from the *θ* of OP **aθman-* must be viewed with reserve, because although I was told by a Bāškardi that in Bal. both *āsmān* and *āhmān* are used, EBal. has *āzmān*, whose *z*, like that of *pažm* 'wool', is from *š*, while *h* in place of *š* before *m* occurs in the word for 'eye', *ēhm*, not only in most Bāškard dialects, but also elsewhere (cf. Andreas, *Dialektaufzeichnungen*, 144 sq., 319, 371, 397). The form **āzmān* underlying EBal. *āzmān* presumably owed its *š* to the oblique cases of OIr. *asan-*, cf. the Av. day-name *ašnō*.

⁴ Although **vaδrka-* cannot be traced even in dialects, a synonymous OP variant of it, **vaδrta-*, can be recognized in Kermani *gohort* (Sotoodeh, *Farhang-e Kermani*), Sōi etc. *gurt* (Andreas, *op. cit.*, 99, 469), Farizandi etc. *gōrd* (Christensen, *Contributions*, i, 237, 292), Bāškardi *gohort*, all meaning

it will scarcely be that all were Median loanwords, as in that case, seeing that beside *trsa-* OP also has *rsa-* 'to go', *prsa-* 'to ask', *yasa-* 'to take', and *xšnāsa-* 'to know', the whole inchoative formation would have been imported from Median.

The reason may simply be this: that *s* and *z* were the regular antevocalic outcome of the IE palatals not only in Median, but also in Old Persian, but from about the beginning of the Achaemenian period an optional realization of *s* as *θ*, and of *z* as *δ*, began to assert itself. *Trsa-* and **tṛθa-* will then have been no more than two equally acceptable, and interchangeable, realizations of one and the same word, and this will be true also of *aθanga-* and **asanga-*, the proper OP ancestor of NP *sang*.¹

It would follow that in Middle and New Persian the contrast between the *s* of *sad* 'hundred' (OP **sata-/θata-*) and the *h* of *dah* 'ten' (OP **dasa-/daθa-*) need not reflect a dialect differentiation. The contrast is better defined as a result of chance developments. In these two numerals *s* and *h* go back to a single OP phoneme; but *sad* chanced to perpetuate one realization of it, while *dah* has perpetuated another.²

The situation is similar in the case of MP *šahr* 'kingdom'.

'*buzurg*'. The suffix was lost in Gabri *gohor* (Sotoodeh, *Farhang-e Behdīnān*), whose counterpart with *z* occurs in Baškardi (*gozer*) and Khuri (*girzotor* 'buzurgtar', Iwanow, *JRAS*, 1926, 430). For the relation between *bu-* and *gu-* from OIr. initial *va-* cf. *burz*: *gurz* 'club' from *vazra-*, J. Elfenbein, *A Vocabulary of Marw Baluchi*, 1963, 25.

¹ In connection with this assumption Professor A. F. L. Beeston has obligingly drawn my attention to the following remarks by W. H. T. Gairdner, *The Phonetics of Arabic* (1925), 19: 'The most notable difference between these Arabic sibilants [viz. *s* and *z*] and the corresponding English ones, is that in Arabic the hiss is very much stronger and more sibilant than in English. So weak and indeterminate does our hiss often appear to Orientals that pronunciation teachers often annoy their pupils by accusing them of having made *θ* instead of *s*.'

² The *θ* of OP **θata-* has been recognized in the *h* of NP *hadba* 'centipede' by Morgenstierne, *NTS*, v, 55, who, however, thinks that the *s* of NP *sad* is also the outcome of OP *θ*. The problem of *sad* is thereby separated, to my mind unsatisfactorily, from that of *āsmān*, *tars-*, and *buzurg*. It is true that in support of Morgenstierne's view one might adduce NP *sanjīdan* 'to weigh' and *diramsang*, whose *s*, on the evidence of Sogd. *δrymδnk*, goes back to an OP dental *θ* (see Henning, *Mitteliranisch*, 50 n. 1, and *Mir. Man.* iii, 904, s.v. *pdhynj-*), as does the *s* of NP *saxt* 'hard' to judge from Khwar.

Here we have MP *hr* from OIr. dental $\theta + r < \text{IE } t + r$, a cluster which remained *θr* in Median and Avestan (e.g. *xšaθra-* 'kingdom', *puθra-* 'son'), but is represented in the OP inscriptions by an emphatic sibilant (*xšaṣsa-*, *puṣsa-*) which survives as *s* for instance in MP *pus* 'son'. But the emphatic sibilant also developed in OP from palatal $\theta + r$, as in *nī-ssi-* 'to hand over', against Av. *nī-sri-*. We must therefore assume that the tendency for dental $\theta + r$ to become an emphatic sibilant was either still in force, or even had not yet developed, when *s* became replaceable with theta. And since we have found that the replacement of *s* with θ was a relatively recent development in the second half of the 6th century B.C., the chances are that the tendency of dental $\theta + r$ to become an emphatic sibilant also only manifested itself at about that time. Until it did so the words for 'kingdom' and 'son' must have had *θr* not only in Median, but in genuine Old Persian as well.

But again, does the survival of *θr* in the shape of *hr* in some MP words,¹ beside the occurrence of *s < ṣ* in others,² really

θyḍ (see Henning, *Mitteliranisch*, 109, n. 2). But an explanation of these words more consonant with the replacement of *s* by θ in OP is at hand: if palatal θ was a possible realization of OP *s*, it is only to be expected that dental θ would occasionally have been realized as *s* in Old Persian. If this is what happened in the case of *sanjīdan* and *saxt*, the Pahlavi spelling *l's*, *g's*, and *nsub'l-* (v. Henning, *BSOS*, x, 105 n. 3) of the words which in Man. MP appear as *r'h*, *g'h*, and *nyxw'r-*, need not be pseudo-historical as is usually assumed.

¹ An example not yet recognized is *ghr'y-* 'to brag', which also occurs in Parthian, and which goes back, with shortening of the unstressed syllable, to **gāθrāy- < *gāθra-rāya-* (cf. Bartholomae, *Air. Wb.* 521 sq., and, for *rāya-*, Henning in my *GMS*, § 565 n.). That MP *hr < θr* was not borrowed from Parthian can be seen from MP *zyhr* 'life' against Parth. *jywhr*, and MP *zhr* 'poison' against Parth. *jhr*. Hübschmann's derivation of the latter from OIr. **jaθra-*, *Pers. Studien* 71, is only in appearance contradicted by Sogd. *j'r* (instead of expected **jθr-* or **jš-*), since the Sogdian form is understandable as a regular outcome of OIr. **janθra-* (Av. **jaθra-*), cf. *GMS*, § 346. Other MP examples, beside *šhr*, are *cyhr* 'essence', **šnwhr* 'gratitude', *phrg* 'watchpost', and *gwhr* 'substance'.

² E.g. MP *pws* 'son', *p's* 'watch', *sh* 'three', or NP *dās* 'sickle', *sift* 'thick' (see Henning, *BSOAS*, xi, 724), and *sust* 'weak' (see Morgenstierne, *NTS*, xii, 266). Initially *s < proto-Ir. θr* seems to be the rule, NP *hirās* 'fear' (see Nyberg, *art. cit.*, 216) being no doubt a Parthian loanword.

mean that the two groups of words belong to different Persian dialects? It may simply be that *θr* continued for a time side by side with the emphatic sibilant, finally to gain the upper hand and become MP *hr* in some words, while the sibilant pronunciation prevailed in others.

We now turn to the astonishing fact that in the OP inscriptions beside *asa-* 'horse' and *visa-* 'all' also *aspa-* and *vispa-* are used, which alone, as *asp* and *wisp*, remained in MP usage.¹ Unlike palatal theta, *sp* from In.-Ir. *św* cannot, of course, represent a peculiar realization of *s(s)*. Clearly the *sp* forms do not belong to the same dialect as *asa-* and *visa-*, and the presumption that they are Median loanwords is strong, as Median is one of the Iranian languages in which In.-Ir. *św* did become *sp*. On the other hand, since Median is only one of the languages characterized by this change, we must inquire whether there are grounds for excluding the alternative interpretation of *aspa-* and *vispa-* as forms belonging to a Persian dialect different from the one in which In.-Ir. *św* had become *s*.

On the Western Iranian treatment of In.-Ir. *św* we now have a note by Henning, who points out that MP *uzwān* 'tongue' seems to have preserved the original cluster *zw* of proto-OP **hizwān-*, the form from which both OP *hizān-* and NP *zabān* developed by different ways (*Asia Major*, N.S., x, 71 n. 13). One may then expect that at the end of the OIr. period some Western dialect(s) still had *sw* from In.-Ir. *św*. In favour of this expectation Henning quotes Parth. *”swn* 'iron', evidently taking this spelling to represent *āswan*.

The word for 'iron' is *āhan* in NP and *āsīn* in Baluči.² In Man. MP it is spelled *”hwn*. Morgenstierne, relying on OP *viθa-* as a side-form of *vis(p)a-* 'all', explained NP *āhan* as from OP **āθanā-*, the spirantic variant of **āsanā-* (*EVP*, p. 12). This was before Parth. *”swn* and MP *”hwn* became known.

¹ Except that in Pahlavi both *aspavār* and *asavār*, 'rider', are found, see H. W. Bailey, *Zoroastrian Problems*, 99 n. 3.

² Bal. *āsīn* does not support the usual view that Pahl. *”syn* was pronounced *āsēn*; cf. also the spelling *”sn* in *Gt Bd* 20.3

If the Parth. form stands for *āswan*, MP **hwn* presumably represents *āhwan*, in which case a derivation of NP *āhan* from OP **āθwan-*, with *h* from *θw* as in NP *čahār* 'four', may seem attractive. On the other hand Parth. **swn* and MP **hwn* may stand for *āsun* and *āhun*, both going back to **āšun-*, the In.-Ir. weak form of **āšwan-*. There can therefore be no certainty as to whether NP *āhan* represents OP **āθan-* or **āθwan-*, especially as the NP form need not directly derive from MP **hwn* even if the latter stood for *āhwan*, the *h* of *čahār* not having been followed by *w* already in MP.

A similar doubt remains unresolved where the word for 'louse' is concerned, for which Morgenstierne recently reconstructed three ancient Western Iranian dialect variants (apud E. Yarshater, *BSOAS*, xxii, 57 n. 1): **spiš-* (> NP *špīš*), **siš-* (> Bact. *šeš*), and **θiš-* (> *teš* and *heš* in Fars dialects). Whether or not *teš* may alternatively represent OP **θwiš-*, there is evidence that *heš* can do so.

The NP verb *angēz-* 'to excite, rouse, provoke' has been connected with Man. MP *hagžēn-* (spelt *hgjyn-*) 'to stimulate, rouse, resuscitate' by Henning, *Sogdica*, 54, who assumed a violent metathesis without committing himself as to the original form. One of the few phonological differences between Pahlavi and Manichean Middle Persian is that in the former dialect OIr. internal *zg* remained unchanged (e.g. in *mazg* 'brain'), while in the latter it became *gž* (*mgj*, pronounced *magž*; cf. also 'spgj' 'slander', against Av. *spazga-*). Accordingly, and in view of the fact that the *j* of Man. MP *gj* cannot be from OIr. *ǵ*, *ž*, or *č*, *hagžēn-* will be the causative of a verb whose original MP form was **hazg-*, regardless of whether the Pahl. spelling *hngyč-* stands for *hangēz-* (from **hazgēn-*) with OIr. *z* preserved for transmission to NP *angēz-*, or for *hangēž-*,¹ in which case NP *angēz-* would have as MP antecedent a form **hangēz-* differing from, and in respect of *z* older than, both the Pahl. and the Man. MP forms. The unextended **hazg-* must have had an intransitive meaning

¹ As Henning assumed, and is attested in the Dailamite proper name *Gōrāngēž*, see Minorsky, *EI*, 2nd ed., 190b.

approaching that of 'to be aroused, astir', which eminently suits Av. *aša-θwō.zga-təma-* (with *θwō.zga* written for **θwazga*) 'der allereifrigste', lit. 'most astir'.¹ The agreement in meaning and post-initial phonetic constitution compels the conclusion that **hazg-* is from **θwazga-*.

The Persian change of *θw* to *h* being thus assured also in initial position, *heš* may go back to either OP **θiš-* or **θwiš-*. Consequently, as **θwiš-* would necessarily have developed from **swiš-*, OP may have had as many as four native variants (or two realizations each of two variants) of the word for 'louse': **siš-* and **θiš-*, **swiš-* and **θwiš-*. It is then extremely improbable that **spiš-* was yet another genuine Persian form, and we may with increased confidence adhere to the prevalent opinion that it, as well as *aspa-* and *vispa-*, were Median loanwords in Old Persian.

But if OP borrowed from Median words with such ordinary, non-technical meanings as 'horse' and 'all', may not also OP *asman-* 'sky', *vazrka-* 'great', and *zūrah-* 'deceit', or the OP ancestors of MP *sang* 'stone', *zādag* 'son', and *šahr* 'kingdom', have been Median loanwords?

Most scholars, I suppose, would answer this question in the affirmative, on the assumption that the superiority of Median culture, combined with the presence among the Persians of any number of Medes, would suffice to bring about a fluctuation in Persian usage between proper Persian words and their Median equivalents.

If, however, one believes that such a fluctuation would not have arisen unless an additional, specifically linguistic cause

¹ Av. *θwazfāiti*, translated by Bartholomae, s.v. *θwaz-*, 'er gerät in Bedrängnis', may as well mean 'he is aroused, startled, upset'. On the origin of Av. *θwa(n)zg/ʃ-* one can only pronounce with diffidence, but clearly the supposedly inchoative formative of IE **tweenǵh-sk-* as reconstructed by Bartholomae (cf. also Pokorny, *Idg. Wb.*, 1099 sq.), is unsatisfactory. It would seem better to start from **tw(e)nǵh-sk-*, becoming **twa(n)g-zǵh-* and further **twa(n)gz-*, whence by metathesis OIr. *θwa(n)zg-*. The *g/ʃ* alternation will then be analogical to that of *rang/ʃ-*, etc. If the same reasoning is applied to Av. *syazg-*, its base will be that of Skt *śigh-ra* 'swift' (Pokorny, 542 sq.), and *syazfāya-* 'to chase' will have literally meant 'to cause to hasten'.

had been at work, the answer will be that the appropriation by the Persian language of Med. *aspa-* and *vispa-* would be more easily understandable if it were true that **asanga-* and **xšaθra-* were original Persian forms which continued to be used beside their new realizations as *aθanga-* and *xšaṣsa-*. For, provided that Median was a language familiar to most Persians at least at Court, the fact that the Median forms **asanga-* and **xšaθra-*, while contrasting with the exclusively Persian variants *aθanga-* and *xšaṣsa-*, were legitimate also in Persian, would lend an air of legitimacy to the Median pronunciation *aspa-* of what in proper Persian sounded *asa-*, even though *this* pronunciation had been exclusively Median to start with.¹

Having considered the status of *s* from IE *ḱ* in Persian, we may close the circle, and return to the problem from which we started—the difference discussed by Henning between OP **vašyah-* and **maθyah-*, as reconstructable from NP *bēš* and *mih*.

As we no longer have reason to doubt that NP *siyāh* is as genuinely Persian as Arm. *šau*, we must conclude that OP had two realizations of this word, **syāva-* and **θyāva-*, and that the latter alone can have been the immediate ancestor of **šyāva-*, whence Arm. *šau*, borrowed from MP **šāu*.² This is precisely what Henning assumed in the case of NP *bēš* and *kašaf*—a change of OP *θy* to *šy*, and ultimately to *š*.

Now Henning, it will be remembered, taking it for granted that it was a characteristic of standard OP to change a dental *θ* to *š* before *y*, assumed that there was an OP dialect different from the standard language, in which also palatal *θ* had become *š* before *y*. But we have noted that the latter development, illustrated by **vašyah-*, need only be attributed to a dialect different from the standard language if the contrary treatment, that is, the failure of palatal *θ* to become *š* in **maθyah-*, had

¹ 'La célébrité des chevaux mèdes' can hardly by itself have introduced *aspa-* into the Persian vocabulary, as Meillet and Benveniste assumed (*Grammaire du vieux-perse*, 9). In any case such an explanation would not be applicable to *vispa-*.

² Cf. also the Pers. LW in Bal. *šā* (Mayer) 'black'.

a phonological reason, and was not merely due to the analogy of the superlative *maθišta-*.

Are there any examples of OP palatal *θ* failing to become *š* before *y* where analogy can fairly be excluded? We have already considered one word which is thought to illustrate this failure, OP **tuθyaka-*. This word, as we saw, was regarded by Nyberg as a proof that the change of dental *θ* into *š* before *y*, had ceased to be active by the time proto-Iranian *s* was changing to *θ*. If this relative chronology were correct it would, as noted above, remove the ground from under Henning's feet, as **vašyah-* could not be from **vaθyah-* if the earlier **vasyah-* had only become **vaθyah-* after *θ* before *y* had ceased to change to *š*.

But apart from the fact that according to Henning palatal *θ* before *y* behaved differently in standard OP from dental *θ*, is Nyberg's premise that OP ever had a form **tuθyaka-* compelling?

Nyberg himself assumed that the immediate ancestor of MP *tuhīg* had the form **tuθiyaka-* because the suffix *-īg* could not have developed from *-yaka-*. On the other hand he inferred from Morgenstierne's reconstruction of the OIr. ancestor of Pš *taš* and Khot. *tuśša* as **tusya-* (EVP, 84), that the Pš and Khot. forms could not alternatively be derived from **tusiya-*. He therefore regarded OP **tuθiyaka-* as having secondarily arisen from **tuθyaka-* quoting in support of this view OP *ha-ša-i-ya-* 'true', from **haθya-* (Ved. *satyá*), which he, in common with most scholars, normalized as *hašiya-*. That the *i* of *hašiya-* was not merely graphic he inferred, closing the circle somewhat viciously, from his assumption that the suffix of *tuhīg* required its OP ancestor to have ended in *-iyaka-*.

This reasoning does not stand up to scrutiny. To judge from Ved. *tucchyá*, the *u* of IE **tus-sk̑iyo-* was still followed at the Indo-Iranian stage by a consonant cluster, if only *śś* or double *š*. The word should therefore, in accordance with Sievers' Law, have entered the proto-Iranian stage with *-iya-*. If at the end of the OP stage Nyberg still wants the word to

have *-iya-*, why postulate an unlikely intermediate stage without *i*? Conversely, if there is proof that in this word IE *iy* had lost its *i* in proto-Iranian, why should one assume that at the end of the OP period the *i* was re-instated? ¹

The answer given by Nyberg to the first question was that Pš *taš* and Khot. *tuśśa* cannot go back to **tusiya-*. In fact they can, if on the one hand Pš *šlēdēl* 'to break' is from *sid-*, as Morgenstierne suggested, and on the other, the Khot. causatives *īśś-* of *īs-* 'to return', and *ggei'śś-* of *ggei's-* 'to turn', go back, as they should, to present stems in *°saya-*.

To the second question Nyberg gave two answers. One was that the suffix of MP *tuhīg* cannot go back to *-yaka-*. This is inconclusive because we neither know that this is so, nor whether the suffix was *-īg* or *-ēg*, nor even whether the MP suffix was the outcome of the OP suffix of this word, or had been added secondarily to **tuh* (cf. below, p. 21, n. 2).

The other answer was that proto-Iranian **haθya-* had become *hašiya-* in OP. In fact the word spelt *ha-ša-i-ya-* was necessarily pronounced *hašya-*, as *š* would not have arisen from *θ* if the suffix had been *-iya-*. Of the two theoretically possible ways of writing *šya*, viz. *ša-ya* and *ša-i-ya*, OP orthography sensibly settled on the latter as the lesser evil, since at least it excluded the reading *šaya*.² Nyberg's reconstruction of **(tuθ)iyaka-* on the strength of MP *tuhīg* (which despite its uncertainty I am prepared to accept on the assumption that the *i* had been present from the beginning of Iranian speech), proves of course nothing where the ending of a different word, OP *ha-ša-i-ya*, is concerned, the more so as unlike the word for 'empty', the ancestor of OP *ha-ša-i-ya-*

¹ Morgenstierne, *NTS* xiii, 1945, 226, similarly derives MP *māhīg* 'fish' from **māθiya-* < **māθya-*, without explaining why the form **māθiya-* which according to Sievers' Law must have preceded **māθya-*, should have lost and reacquired its *i*.

² Because the *a* vowel was inherent in the majority of OP consonantal signs, the *i* sign was inserted before the *ya* sign after most consonants. The writing *i-ya* was then extended to the few cases where the *i* sign was unnecessary, that is, after consonantal signs whose inherent vowel was *i*, as in *ja-di-i-ya-* = *jaḍya-* 'to ask'.

and, for that matter, the ancestors of all the attested OP words with *šy* from *θy*, should by Sievers' Law have entered the proto-Iranian stage with *y*, and not *iy*.

And so, in the last resort, the existence of **tuθya(ka)-* from **tusya(ka)-* could only be proved if a form requiring an OP **tušya(ka)-* were discovered in a Persian dialect.¹ But this would be the very form on whose non-existence Nyberg's relative chronology depends. The only means of proving that chronology would, if it turned up, disprove it.

But even Nyberg's ultimate premise is one which I believe he would no longer care to defend. The interest he had in proving that **tuθiyaka-* had been preceded by **tuθya(ka)-*, and the latter by **tusya-*, arose from his conviction that in intervocalic position the OP outcome of IE (s)s^h had remained a double *s* until single *s* ceased to become *θ*, this being proved by the contrast between OP *aθanga-* and *tṛsa-*; but that before consonants, that is, for practical purposes, *y*, the double *s* had been degeminated early enough to share the shift to *θ* with originally single *s*, this being proved by **tuθya-*. Today we can see that matters stand otherwise: *tṛsa-* had a variant **tṛθa-*, just as *aθanga-* need have been no more than a variant of **asanga-*. MP *tuhīg*, therefore, if its OP ancestor had *-iya-* from the beginning, would be nothing but a standard-Persian counterpart, with *h* < *θ* < intervocalic IE (s)s^h, of the dialectal *tehr-* of Southern Baškardi. The *h* of *tuhīg* being thus accounted for on the basis of Nyberg's own derivation of the word from OP **tuθiyaka-*, he no longer has a stake in an earlier form **tuθyaka-*; which does not mean that if the proto-Iranian form had indeed been **tusya-*, the ancient Persians could not have realized it as **tuθya-* without ever inserting an *i* before *y*.²

¹ One would of course have to make sure that the dialect word in question really continues **tušyaka-*, and not **taušaka-*, cf. Av. *taoš-*.

² OP **tuθya-* was in fact postulated by Morgenstierne, *EVP*, 84, before the publication of Nyberg's article, as the ancestor of NP *tih* 'empty', in agreement with his derivation of Pš *taš* from **tusya-*. However, since OIr. *u* not infrequently became *i* in NP, *tih* may equally well represent OP **tuθa-* < proto-Ir. **tusa-* < IE **tus-s^hko*; cf. Skt *tuccha*.

If the relative chronology which Nyberg extracted from *tuhig* can now be seen to lack all cogency, it is, however, also true that *tuhig* cannot help us to decide whether the θ of **ma θ yah-* was analogical or spontaneous.¹ We must therefore look elsewhere for guidance.

The OP inscriptions provide two instances of a palatal θ which, to go by Sievers' Law, must have stood immediately before *y*. One is *vi θ yā*, the loc. sg. of *vi θ -* (Ved. *viś*) 'house', the other the passive present stem *fra θ ya-* 'to be punished' of *fra θ -* (Av. *fras-*). But here again it may be thought that the failure of θ to become \acute{s} was due to analogy, as the inflection of *vi θ -* and *fra θ -* included forms where θ was intervocalic.

Let us therefore, for the moment, disregard also these words, and turn to one which, though it has no theta, presents us with a delta which is believed to be palatal. This is the native form of the name Herodotus quotes as *Smerdis*, which in the OP version of the Behistun inscription is written *ba-ra-di-i-ya*, in the Elamite version *pir-ti-ia*, and in the Akkadian version *bar-zi-ia*.

The OP spelling is usually normalized as *Bardiya-*. But the El. spelling strongly suggests that the name was pronounced *Bṛḍya-*. For the El. sign *pir* never occurs in Iranian loanwords where an *a* stood between the labial and *r*.² And if the first syllable was *br*, Sievers' Law requires the suffix to have been *-ya-*, and not *-iya-*.

The Akk. form, whose first syllable we shall also normalize as *br*, is of course usually thought to be Median. We shall be more inclined to regard it as a proper Persian variant of *Bṛḍya-*.

But here a word of caution must be entered. The definition of Akk. *bar-zi-ia* as a Median form implies that its *z* reproduces

¹ The evidence of *tuhig* would be inconclusive in this respect even if its immediate ancestor were **tu θ yaka-*. If OP had **tu θ a-* in addition to **tu θ ya-* (see the preceding fn.), the persistence of θ in the former might have checked its tendency to become \acute{s} in the latter.

² El. *pir* usually represents the consonant cluster of the OP preverb *fra*. For Ir. *br-* only one example is available, viz. El. *pir-ra-iz-man*^o for OP *brazman*^o.

an Iranian *z*. It does not seem to have occurred to anybody that, since Akk. *z* is used for rendering not only Ir. *z*, but also *ž* (cf. Akk. *kam-bu-zi-ia* = OP *Kambužya-*), the spelling *bar-zi-ia* may alternatively convey an OP pronunciation *Bržya-*. Accordingly, since *Brδya-*, being the form used by a Persian king of the name of another Persian king, is unlikely to have had an exclusively Median delta, three kinds of relationship between it and the Iranian form underlying Akk. *bar-zi-ia* can be envisaged.

If one says that in this name the Akk. *z* stands for Ir. *z*, in which case the delta of *Brδya-* would necessarily be palatal, one may see in the latter's preservation before *y* a confirmation of Henning's view that the preservation of theta in **maθyah-* was spontaneous, and not analogical.

And if one thinks that the Akk. *z* stands for Ir. *ž*, the delta of *Brδya-* nevertheless being palatal, one may say that the two forms, *Brδya-* and *Bržya-*, illustrate in respect of palatal delta the dialect variation which in respect of palatal theta was recognized by Henning in the contrast between **maθyah-* and **vašyah-*.

But if one believes that the genuinely Persian delta of *Brδya-* was dental, in which case the Akk. *z* will necessarily stand for *ž*, it will be difficult to avoid the conclusion that not only a dental delta, but also a dental theta, must have been able to stand before *y* without thereby disqualifying the word in which it occurs from being Persian. In other words, one will expect that beside the attested *mṛšyu-* 'death', a form **mṛθyu-* identical with Av. *mərəθyu-*, must also have existed in genuine Old Persian.

And the moment this conclusion has been reached, it will appear that OP *xšāyaθya-*, ancestor of NP *šāh*, whose *θ* represents indeed an IE dental, is not a Median loanword, as has invariably been assumed, but as Persian as commonsense suggests it to be.

I willingly admit that in the form in which I have argued the case the conclusion is contingent on a premise in which I do not believe. Regardless of whether the Akk. *z* in Smerdis's

name represents *z* or *ž*, there is no reason why the usual etymology of OP *Bṛδya-* as belonging to Av. *bərəz-* 'high, exalted' should be discarded. The conclusion, however, once envisaged, cannot lightly be dismissed. For two other considerations also lead to it.

Firstly a general consideration. If there is one point one may hesitate to accept in Henning's theory, it is that in standard OP *θ* before *y* would behave differently according as it was palatal or dental. If dental, Henning assumed, the theta would turn into *š* before *y*, if palatal it would remain unchanged; so that **vašyah-*, with its former palatal *θ* turned into *š*, would have to belong to a Persian dialect different from the one to which *mṛšyu-* belonged, with its *š* from dental theta. I find it difficult to believe that the ancient Persians felt a difference between thetas which only we, thanks to the comparative study of Indo-European, know to have been of different origin. And I would see a proof that all thetas were alike to them, in the fact that *θ + r* resulted, as we have seen, in an emphatic sibilant regardless of whether it was dental or palatal.¹

The second consideration is that, if we are right in dating the OP realization of *s* as *θ* approximately in and after the middle of the 6th century, the chances are that as **vašyah-*, being from **vaθyah-*, could not have come into being before that date, the replacement of dental *θ* before *y* with *š* was still liable to occur at the time when *xšāyaθya-*, as a Median loanword, would have been borrowed. If Median **ganza-* continued to be widely used in OP beside its exclusively Persian realization as **ganḍa-*, this must have been because antevocalic *z*, as we have tried to show, occurred also in

¹ Similarly the rule that *θ* becomes *š* before *n* in OP applies to both dental and palatal theta; cf. on the one hand OP *vašnā* 'by the will' against Av. *vasna*, on the other OP *arašn-* 'cubit' against Av. *arəθn-*. The assumption that the *šn* of Av. *frašna-* goes back straight to proto-Ir. **sn*, while in OP *vašnā* *šn* is from **θn* < proto-Ir. **sn*, agrees with Henning's explanation of OP **vašyah-* as from **vaθyah-* < **vasyah-*. If the assumption is correct, OP **yažna-* and **gažna-* (see above, p. 10, n. 1) will have had as immediate antecedents **yaḍna-* and **gaḍna-*.

genuine Persian words. By the same token one would not expect the θ of Median *xšāyaθya-* to have resisted the change to š , unless it might also have done so if the word had been genuinely Persian. But if the failure of θ to become š in *xšāyaθya-* is a Persian trait regardless of whether the word was a borrowed one or not, what reason remains for regarding it as a loanword?

Where delta before y is concerned, the OP inscriptions provide one instance each of a palatal and a dental one, both in present stems: *yadya-* 'to be worshipped' (Av. *yazya-*), and *jadya-* 'to ask' (Av. *ǰadya-*). To the latter example one may add **maḍyāna-* 'middle', vouchsafed by MP *miyān*. Are we entitled to expect that there was an OP dialect in which the verb for 'to ask' might have appeared as **jažya-*, and the word for 'middle' as **mažyāna-*? As the theoretically possible reading **Bržya-* of the Akk. spelling *bar-zi-ia* of Smerdis's native name cannot be substantiated, we lack an assurance that OP delta, dental or palatal, ever did change into ž before y . But firstly this change would be fully in agreement with that of θy to šy on the one hand, and the probable one of δn to žn on the other (cf. above, p. 24, n. 1), and secondly its assumption would make it possible to apply to a puzzling present stem quoted from the Kurdish dialect of Kalūn-Abdū, an explanation parallel to the one Henning offered of NP *andēš-* and *xurōš-* (cf. above, p. 3, n. 1).

The Kal.-Abd. verb *kēž-* 'to throw' has been connected by Barr (see Andreas, *Dialektaufzeichnungen*, 394, 443 n. 2, 476) with *karz-* 'to shoot', which occurs in the Fars dialect of Somγūn (see Mann, *Tājīk-Mundarten*, 36a, 55a). Barr tentatively assumed that *kēž-* had been borrowed from a Parthian dialect, so that the z of *karz-* would be due to normal MP depalatalization of OIr. $\text{ž}/\text{ǰ}$. However, on board a vessel in the Persian Gulf I recorded from a Baluči sailor the evidently Persian compound *tire-peikāl* 'bow' which, if Somγ. *karz-* is compared, appears to mean literally '(instrument for) shooting arrows'. The same base *kāl-* from OP **kard-* seems to occur, borrowed from Persian, in the Northern

Baškardi and Baluči word for 'archer', *mīšekāl*, which as the name of a certain Southern Baškardi-speaking tribe is indifferently pronounced with final *-l* or *-r*.¹ Accordingly the modern forms can be taken to reflect three OP present stems (strictly speaking two, one of them appearing in two realizations): **karza-* > *karz-*, **kardā-* > *°kāl-*, and **karḍya-* > **karžya-* > *kēž-*.² And if palatal delta before *y* became *ž* in one OP dialect, no doubt the same as had **vašyah-* from **vaθyah-*, the dialect, whether or not it be the same as the preceding, in which dental theta became *š* before *y*, will correspondingly have replaced dental delta with *ž* in the same position.³

But is the present stem *jaḍya-* a safer witness to the phonological disinclination of a certain OP dialect to change dental delta before *y* into *ž*, than **maθyah-* is to the spontaneous perseverance of palatal *θ* before *y*? Might not delta in this present stem owe its preservation to the analogy of forms in which the delta of the verb *gaḍ-* remained unchanged because

¹ In Southern Baškardi OP *rḍ* has been reduced to *r*, regardless of whether the delta was dental or palatal.

² Barr compared the relation of *kēž-* to *karz-*, to that of Garrūsī *beržān* 'eye-lash' to Bact. *mirzang*, op. cit., 138 sq., 295 sq., 476. With *beržān* one may now range, with initial *m* preserved, Luri *moržang* and *maržān* (quoted by Unvala, *The Luri and Dizfūli Dialects*, 29), while *mirzang* is ultimately identical with Bami *melāl* (Sotoodeh, *Farhang-e Kermāni*, 171), a form known to me also from Bandarī (the dialect of Bandar Abbas) and Southern Baškardi (as a Pers. LW). The variant *menāl*, which I recorded from Rudbārī and Northern Baškardi informants, shows that *melāl* is from **milān*. One would therefore again posit three OP forms, **mržāna-* > *mirzang*, **mrḍāna-* > **milān* > *melāl*, and **mrḍyāna-* > **mržyāna-* > *beržān*, if it were not that *beržān* might alternatively have resulted from a contamination of **mirzān* and NP *miže*; the last, which is presumably a Parth. LW, belongs to the OIr. base **miš-* attested through MP *nmyz-* (see Henning, *Sogdica*, 5) and Khot. *nāmūjs-* (see Bailey, *BSOAS*, xxiii, 23).

³ Of the four NP words displaying a *ž/š* for which Hübschmann, *Pers. Stud.*, 224, could not account, none is relevant to our problem: *nižād* 'family, extraction' is evidently not from **nizāti-* as Hübschmann thought, but from **niž-zāti-*; *bišisk* 'physician' has *š* < *ž* < *z* by assimilation to the following *š*; on *diž* 'fortress' and *buš* 'goat' Professor Henning has kindly given me his opinion that they are mere inventions of Persian lexicographers.

its position was intervocalic? ¹ Did we not above, p. 22, refrain for a similar reason from relying on the present stem *fraθya-*?

The answer to the last question is that we need not have done so. For NP *andēš-* and *xurōš-* (above, p. 3, nn. 1 and 2) have š, and Kal.-Abd. *kēž-*, if correctly explained by us, has ž, only because their ancestral present stems **handaiθya-*, **xrauthya-*, and **karđya-* ² were not prevented by the existence of present stems such as **^odiθa-*, **xrauθa-*, and **karða-*, from undergoing a shift to **handaišya-*, **xraušya-*, and **karžya-*.

Accordingly OP *fraθya-* and, indirectly, *yađya-*, may be allowed to bear witness to the phonological regularity of the palatal theta of **maθyah-*, and *jađya-* to confirm, by implication, the Persian authenticity of the dental theta of *xšāyaθya-*.

On Henning's theory of a Persian dialect differentiation illustrated by NP *mih* < **maθyah-* versus *bēš* < **vašyah-* < **vaθyah-* we thus reach the conclusion that it is correct, with one reservation: no difference was made in either dialect between dental and palatal theta; whatever its origin, theta before *y* became š in one dialect, and remained unchanged in the other, so that in the language of the inscriptions the missing **vašyah-* may be said to be represented by *mṛšyu-*, and the missing **maθyah-* not only by *fraθya-*, but also by

¹ The Parth. present stem *ng'y-* was translated by Andreas and Henning, *Mir. Man.* iii, as (1) 'to sing', and (2) 'to implore', and the noun *ng'd* similarly as (1) 'singing', and (2) 'imploration'; Ghilain, *Essai*, gave as only meaning 'chant(er)'. The second meaning suits the contexts better than the first, which seems to have been inferred exclusively from the supposed etymology of these words as from **gāya-/gāta-* 'to sing'. *Ng'y-*, however, may just as well go back to an OIr. pres. stem **ni-gāda-*, and *ng'd* to a noun **ni-gādā-* derived from it, cf. Sogd. *nyʾyʾd* 'prayer'. The Parth. alternation of *d* and *y* would be as in *w'dʾg* 'leader' against *w'y-* 'to lead', from the base *vad-*. OIr. **ni-gāda-* would also account more satisfactorily than the usual etymology from *gāy-* 'to sing', for the meaning of Pahl. *niyāyīšn*, which translates Av. *nəmah-* 'prayer'. Salemann came near this interpretation of *niyāyīšn* when in *Man. Stud.* i, 100 he suggested reading the word *nizāyīšn* on the strength of Man. MP *nyz'y-* 'to implore' < **ni-šāda-*.

² These present stems, and the one underlying the verbal noun **xšāya-* (above, p. 3, n. 2), infringe Sievers' Law, as do several Vedic present stems in *-ya-*, cf. Edgerton, *Language*, x (1934), 255.

xšāyaθya-. On the statistical level, therefore, the language of the OP inscriptions appears to be the dialect in which *θy* had become *šy*, except in such words as belonged to another Persian dialect, exempt from this change.¹

As to the reputedly Median features of OP other than the *θ* of *xšāyaθya-*, our conclusion is that the presence in an OP word of *s* or *z* from an IE palatal, or of dental *θ* before *r*, does not prove Median provenance, while the presence of *sp* from Indo-Iranian *św* does. It is therefore only OP words showing this last feature, or *f* from proto-Iranian *hw* (as in *farnah-*), or *nz* from *zn* (as in **ganza-*), or post-vocalic *t* at the end of first compound-terms (as in **Zarat-uštra-*, see *JNES*, xxiii, 1964, 38), that can confidently be regarded as having been borrowed from Median.

¹ From a systematic point of view one may say that there is no advantage in defining NP *šāh* as Median because of its *h*, if NP *mih* despite its *h* must be regarded as genuinely Persian.

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